The Knowledge Bank at The Ohio State University

Ohio State Engineer

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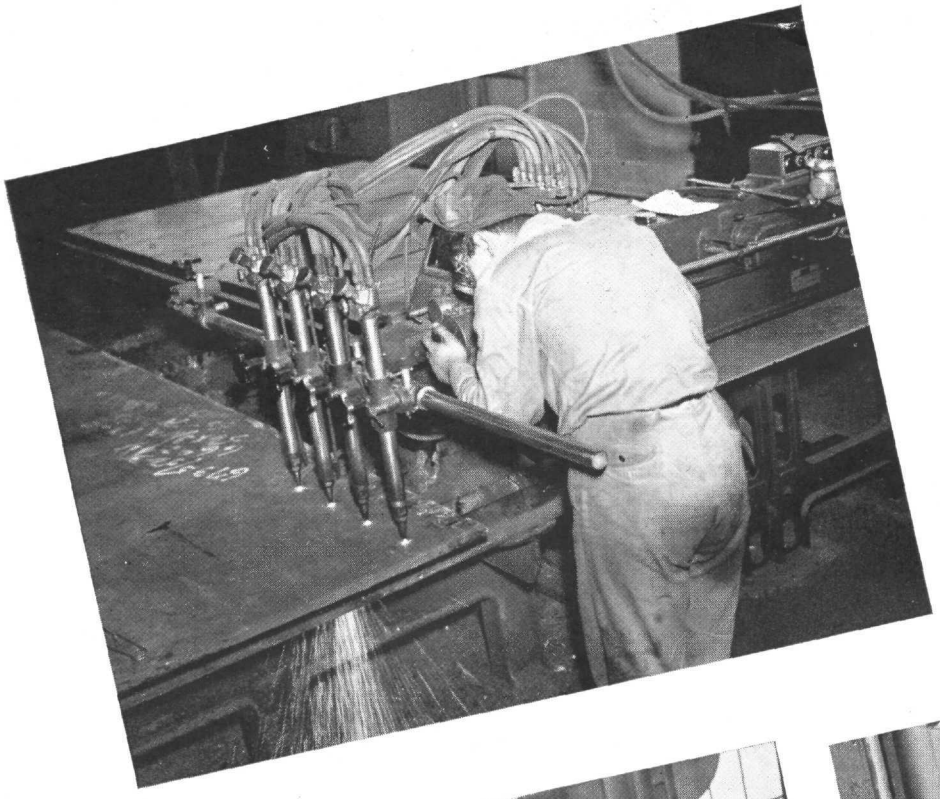
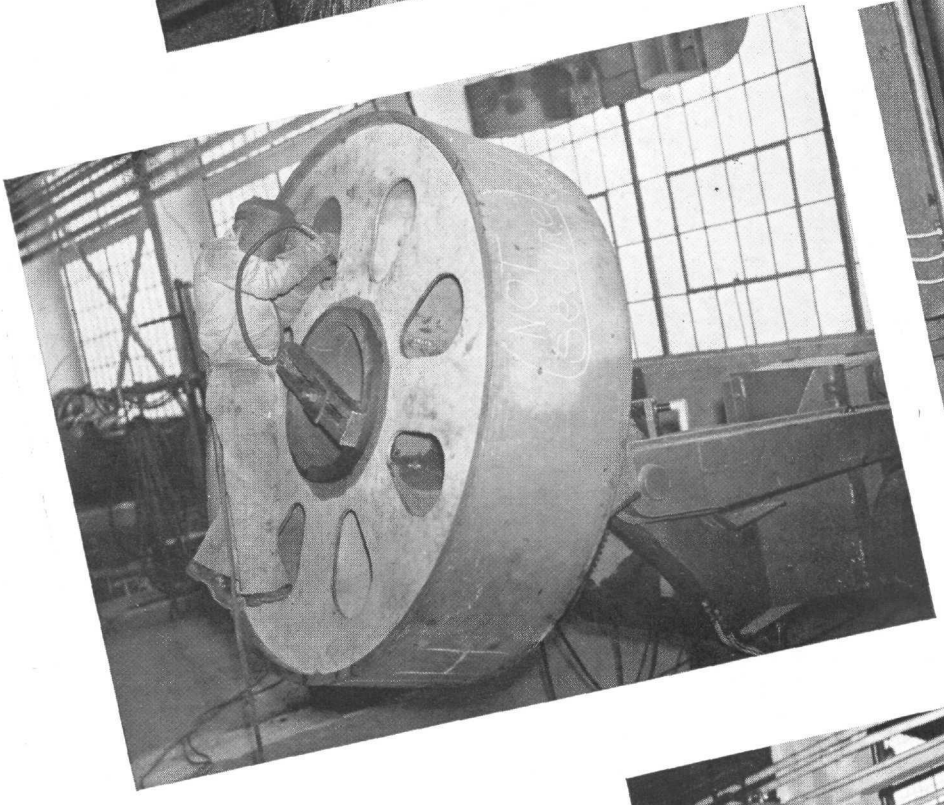
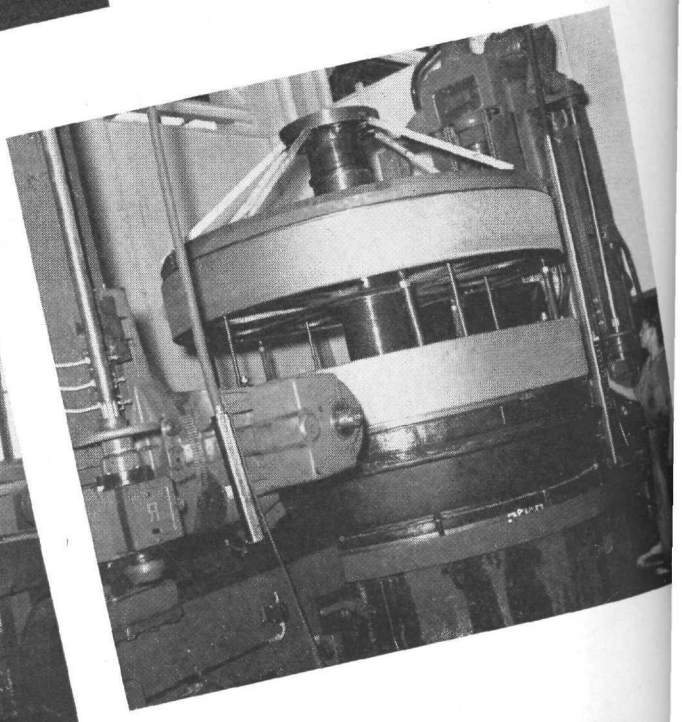
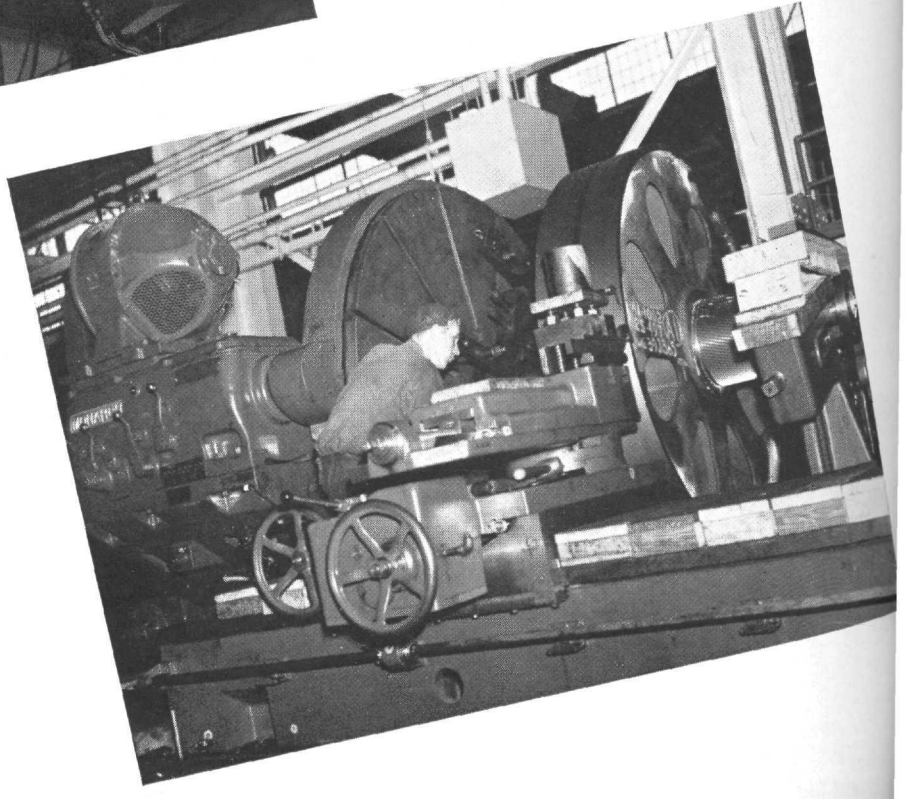


LEFT. ● Four duplicate pieces are cut simultaneously by these oxyacetylene torches. Bearing housings, gear housings, and gears are fabricated from steel plate. Courtesy Westinghouse

BELOW: ● 306 hours will be required to generate the teeth on these two bull gears which are being hobbed in an air-conditioned room on a double cutter hobbing machine.
Courtesy Westinghouse







ABOVE: ● The interior radial ribs are being welded to the rim and hub of the large high-speed gear blank. This type of construction greatly reduces the weight. Courtesy Westinghouse

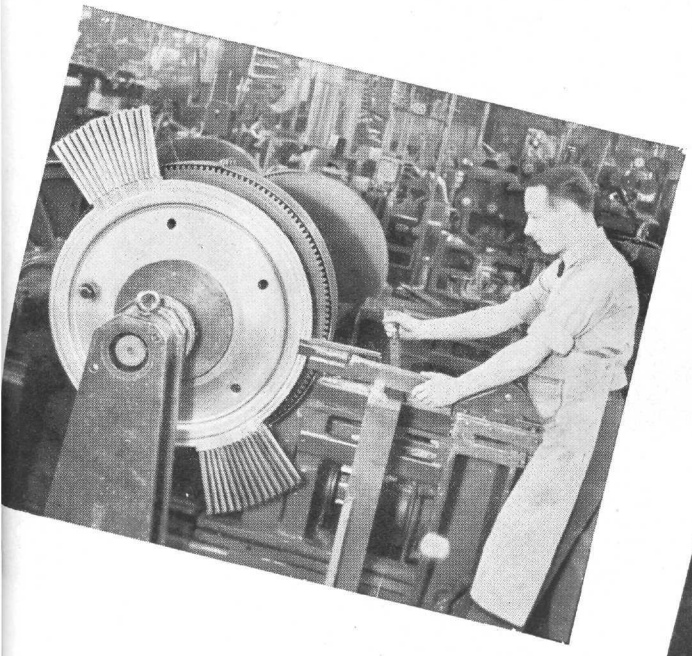
RIGHT: ● The gear blank in this 200 inch lathe is 75½ inches in diameter. In marine turbine units, gears up to 146 inches in diameter are used.
Courtesy Westinghouse

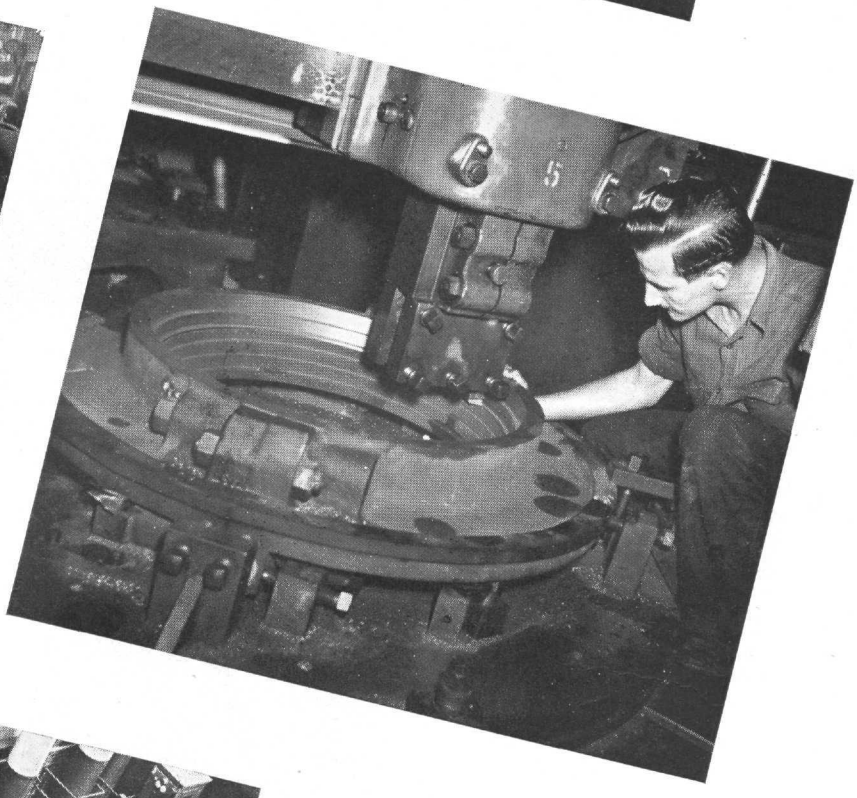
RIGHT: ● The joint face of this low-pressure turbine casing is being planed on the Betts pit type planer.

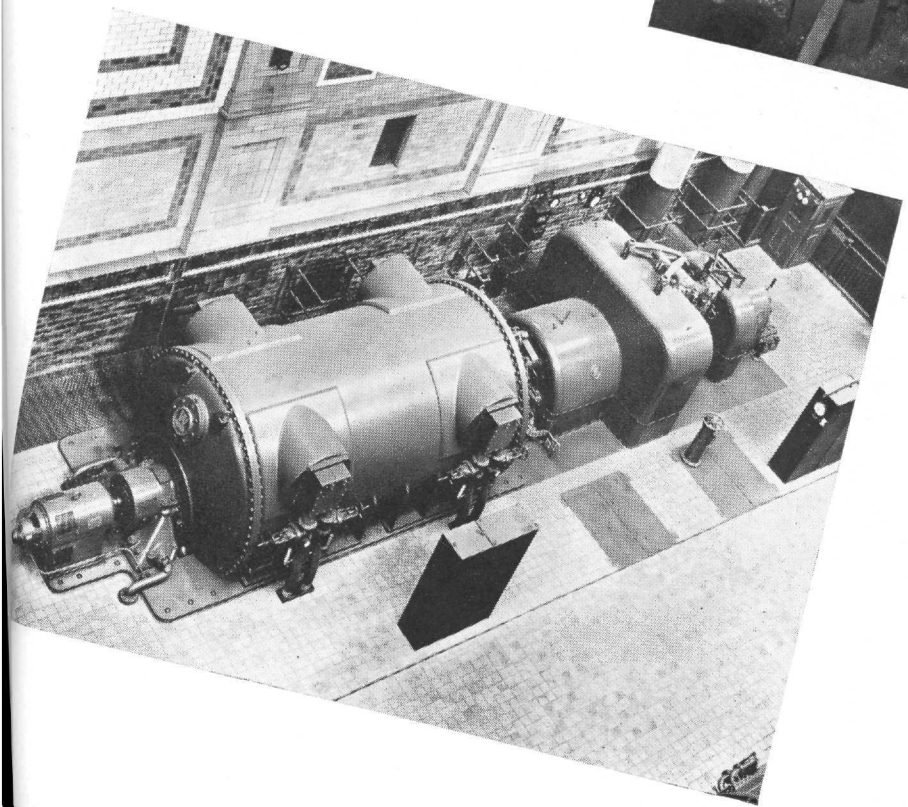
Courtesy Westinghouse

BELOW: ● After the dovetail on each bucket is engaged with the dovetail groove on the wheel disk, it is pressed into position by rotating the wheel.

Courtesy General Electric





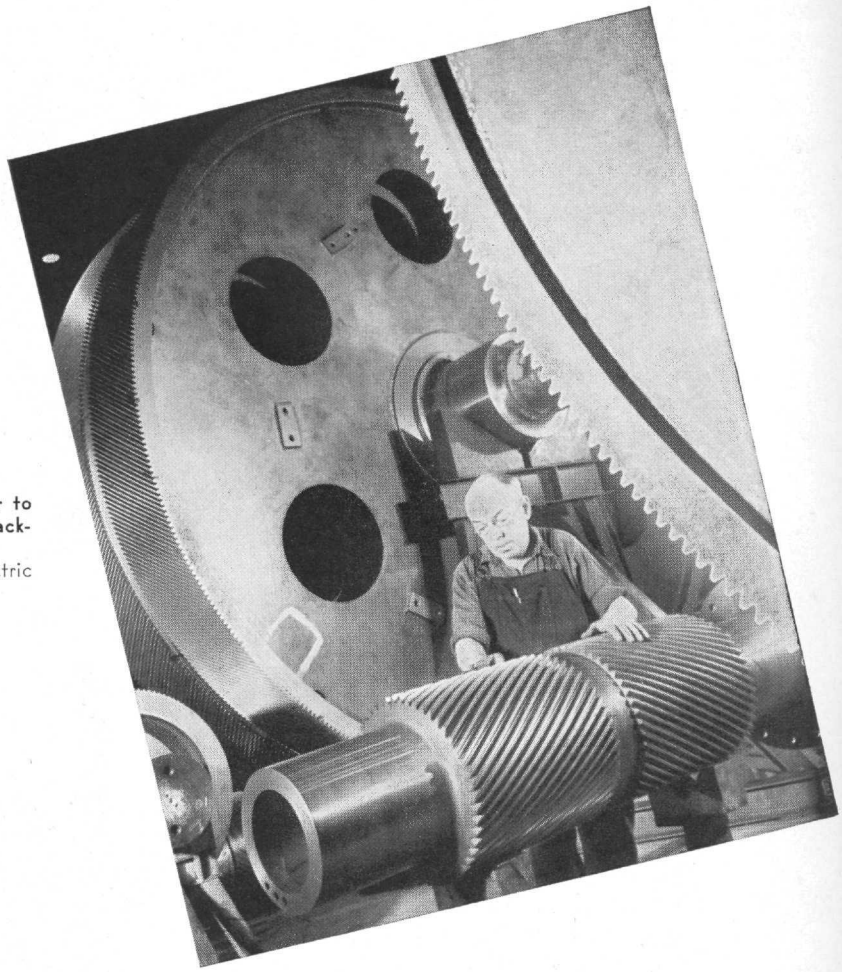


ABOVE: ● The blade grooves in the low-pressure blade ring are being finished on the 100-inch vertical boring mill.

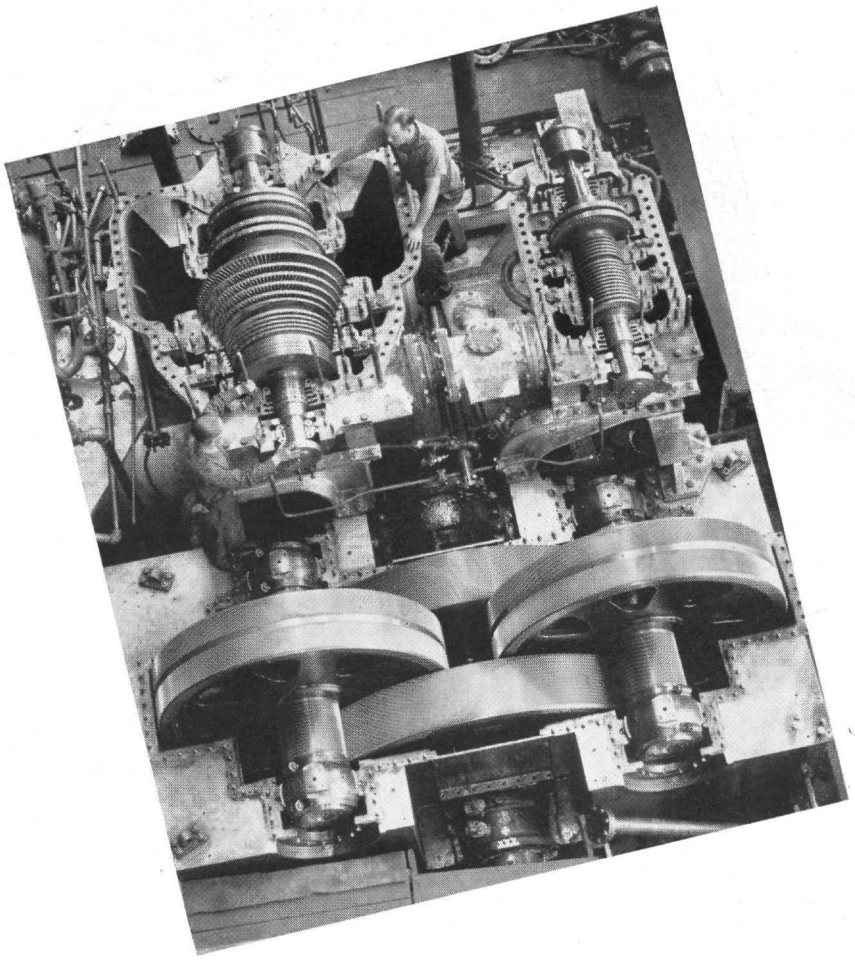
Courtesy Westinghouse

LEFT: ● This superposed turbine generator unit is capable of generating 50,000 h. p.

Courtesy Westinghouse



RIGHT ● Herringbone pinion gear to mate with bull gears shown in background for final drive assembly.
Courtesy General Electric



LEFT: ● The high pressure turbine (rear right), the low pressure turbine (rear left), and the reduction gears are being assembled. The two helical bull gears will drive the output shaft.
Courtesy Westinghouse

MEET TOM!

TOM is an expeditor for a New Jersey war plant. All day long, he contacts suppliers and subcontractors by Long Distance.

"Are the castings ready? . . . OK New Orleans."

"Hello Detroit, have those parts been shipped?"

"Have you received the brass yet, Atlanta?"

Urgent war calls like Tom's are crowding Long Distance lines, 'round the clock. And the load is increasing daily. Won't you help us give war calls the right of way by observing these simple rules.

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2. If you must call, plan your conversation.
3. When you find the circuit busy, cancel your call if possible.

Thank you for your help.

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